DOOYELRE LOIDIE

10

15

Sut

Claims

A compound, or a pharmaceutically acceptable salt thereof, having the following formula I:

$$HN$$
 $NH(CH_2)\Pi$
 $COOR$

wherein n is an integer from 0-1, and R is elected from the group consisting of hydrogen, C_{1-10} alkyl, C_{1-10} aryl and

2. The compound of claim 1, which has the following formula II:

$$HN$$
 H_2N
 $NH-CH_2$
 $COOCH_2$
 $COOCH_2$
 $COOCH_3$

- 3. A pharmaceutical composition, which composition comprises the compound of claim 1.
- 4. The pharmaceutically composition of claim 3, which further comprises a pharmaceutically acceptable carrier or excipient.
- 5. A method for treating or preventing a disease or disorder caused by Helicobacter pylori (H. pylori) infection, which method comprises administering, to a subject to which such treatment or prevention is needed or desirable, an effective amount of the compound of claim 1, or a pharmaceutically acceptable salt thereof, thereby said disease or disorder is treated or prevented.

25

20



- 6. The method of claim 5, wherein the subject is a mammal.
- 7. The method of claim 6, wherein the mammal is a human.

8. The method of claim 5, which comprises administering the compound of claim 2, or a pharmaceutically acceptable salt thereof, to the subject.

- 9. The method of claim 5, which comprises administering the pharmaceutical composition of claim 3 to the subject.
- 10. The method of claim 5, wherein the disease or disorder caused by H. pylori infection to treated or prevented is chronic gastritis, gastroduodenal ulcer, adenocarcinoma of the distal stomach, gastric lymphoma or gastric cancer.
- 11. The method of claim 5, wherein the subject is treated without administering an anti-H. pylori agent.
- 12. The method of claim 1, wherein the anti-*H. pylori* agent is proton-pump inhibitor (PPI), metronidazole, clarithromycin or amoxicillin.
- 13. The method of claim 5, wherein the *H. pylori* is a resistant strain induced by PPI, metronidazole, clarithromycin or amoxicillin treatment.
- 14. The method of claim 5, wherein the compound or a pharmaceutically acceptable salt thereof is administered by intracavernous injection, subcutaneous injection, intravenous injection, intradermal injection, oral administration, or topical administration.
- 15. The method of claim 5, which further comprises a step of diagnosing or pragnosing *H. pylori* infection in the subject.

☐ ☐ ☐ 15

ļ

(T)

20

25



5

10

16. A combination, which combination comprises the compound of claim 1, or a pharmaceutically acceptable salt thereof, and an anti-H. pylori agent.

- 17. The combination of claim 16, wherein the anti-H. pylori agent is PPI, metronidazole, clarithromycin or amoxicillin.
- 18. A method for treating or preventing a disease or disorder caused by *H. pylori* infection, which method comprises administering, to a subject to which such treatment or prevention is needed or desirable, an effective amount of the combination of claim 16, or a pharmaceutically acceptable salt thereof, thereby said disease or disorder is treated or prevented.
- 19. A kit, which kit comprises the compound of claim 1, or a pharmaceutically acceptable salt thereof, and an instruction for using said compound or pharmaceutically acceptable salt in treating or preventing a disease or disorder caused by *H. pylori* infection.
- 20. A kit, which kit comprises the combination of claim 15, and an instruction for using said combination in treating or preventing a disease or disorder caused by *H. pylori* infection.

DOOYSING INT